

**Notice of Allowability**

Application No.

09/939,432

Examiner

Anthony Ojini

Applicant(s)

TAYLOR, THEODORE M.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/8/03.
2. ☒ The allowed claim(s) is/are 48-50, 53-56 and 58-66.
3. ☒ The drawings filed on 24 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☒ including changes required by the proposed drawing correction filed 08 December 2003, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                           |                                                                                     |
|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No. _____  | 7 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|                                                                                                           | 9 <input type="checkbox"/> Other                                                    |

  
**LEE D. WILSON**  
**PRIMARY EXAMINER**

### REASON FOR ALLOWANCE

The following is a statement of reasons for the indication of allowable subject matter: a system for restoring a contact surface of a processing pad used in processing microelectronic workpiece comprising the specific limitation of “an end-effector carrier assembly (170) having and end-effector (162) comprising a plurality of microstructures (166) on the conditioning surface, the microstructures being arranged in a pattern corresponding to a desired pattern of microfeatures to be impacted on the contact surface of the processing pad, and the microstructures being raised elements (168) projecting from the conditioning surface and/or depressions in the conditioning surface” **in the combination as claimed in claims 48,53,55**; “an end-effector carrier assembly (170) having and end-effector (162) comprising a plurality of microstructures (166) on the conditioning surface, the microstructures being arranged in a pattern corresponding to a desired pattern of microfeatures to be impacted on the contact surface of the processing pad, and the microstructures being raised elements (168) projecting from the conditioning surface and/or depressions in the conditioning surface, and a heater (180) carried by the end-effector (162)” **in the combination as claimed in claims 58,59**, are not anticipated or made obvious by the prior art in the examiner’s opinion. For example **Sandhu et al.** (5,975,994) disclose a apparatus (100) for conditioning surface of polishing pad (140), comprising a platen (120) for supporting the polishing pad (140); a conditioning carrier assembly having a holder (164) positioned over the polishing pad (see fig. 2); and conditioning element (170) that defines a front side and carried by a holder (164), the conditioner having a conditioning surface configured to

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engage the contact surface of the polishing pad (140). **However**, the art of record considered as a whole, alone or in combination, fails to provide or suggest, "an end-effector carrier assembly (170) having an end-effector (162) comprising a plurality of microstructures (166) on the conditioning surface, the microstructures being arranged in a pattern corresponding to a desired pattern of microfeatures to be impacted on the contact surface of the processing pad, and the microstructures being raised elements (168) projecting from the conditioning surface and/or depressions in the conditioning surface and a heater carried by the end-effector to provide heat to the conditioning". Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AO  
March 29, 2004

  
**LEE D. WILSON**  
**PRIMARY EXAMINER**